

TRANSMITTING AND RECEIVING APPARATUS

ABSTRACT OF THE DISCLOSURE

An antenna for transmitting information by means of electromagnetic fields in free space is
5 formed as a supertoroidal conductor, comprising a helical coil of wire with the coil itself being wound helically around a toroidal former to form a toroidally shaped coiled coil. Higher orders of
10 supertoroid are formed by replacing the wire of the above first order supertoroidal conductor with a helical coil. The supertoroidal antenna is energized from a signal generator generating signals including frequencies not less than $2c/l$, where l is the length of conductor in the supertoroidal antenna. Both
15 transmitting and receiving arrangements are disclosed.